a rigid proximal region;

a distal region; and

a flexible region disposed between and connecting said rigid proximal region and said distal region, said flexible region with a tube wall having a slit, said slit winding in a helical path about a longitudinal axis of said tube and meandering back and forth with respect to said helical path, wherein said meandering slit defines alternating teeth and recesses, wherein each recess has an associated tooth and each tooth is disposed in a recess, said teeth and said recesses having a shape which prohibits an axial slippage of said teeth out of said recesses.

B2 Cond

Remarks

The Examiner has rejected claims 24 to 28 under 35 USC 102(b) as being anticipated by Pletscher. Claims 14 - 23 have been rejected under 35 USC 103(a) as being unpatentable over Trott in view of Pletscher.

In responding to these rejections, the applicant has amended independent claims 14 and 24 to include the limitations of former claims 15 and 25 respectively, to specify that the teeth and the recesses of the meandering slit have a shape which prohibits axial slippage of the teeth out of the recesses. Although the Pletscher reference discloses a tooth structure in figures 3 and 5, these teeth and recesses are not structured to prevent an axial disengagement of the teeth from

the respective recess. Moreover, prevention of such an axial displacement is not desired by Pletscher since the purpose of Pletscher is to propagate torsion forces through a shaft without sacrificing the flexibility thereof. (Pletscher column 1, lines 6 to 10 translated as follows: "In this fashion torsion forces which occur in such a shaft are directly transferred from one band winding to the next without decreasing the flexibility of the shaft "). The ability of the teeth to at least partially disengage the associated recesses of Pletscher improves the flexibility thereof. Pletscher therefore teaches away from the invention as claimed, since no means are provided to prohibit axial slippage of the teeth out of the recesses.

The invention as claimed discloses a feature which advantageously improves the mechanical stability of the surgical instrument in response to axial loads. The invention therefore recites features not disclosed in the prior art of record having associated advantages and is therefore sufficiently distinguished from that prior art to satisfy the requirements of both 35 USC 102 and 35 USC 103.

REQUESTS

The instant application is a resubmittal of an application which was lost by the US PTO. An associated petition requesting reassignment of the current filing date to the filing date of the lost application was filed in the response to the notice to file missing parts in the instant

application. Prior to passage of the instant application to issuance the Applicant therefore requests referral of the file to the Petition Office for a decision on that petition prior to passage of this application to issuance.

No new matter has been added in this amendment.

Very truly yours,

Paul Vincent

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Enclosures:

Amended claims 14 and 24 in square bracketed and underlined form

14. (amended) A surgical instrument for the removal of tissue, the instrument comprising:

an outer tube having an opening in a distal region thereof for accepting the tissue;
an inner tube disposed within said outer tube, said inner tube having a rigid proximal region for transmitting forces or momenta acting on said inner tube proximal region to a distal region of said inner tube, said [the] inner tube having a flexible region between said inner tube proximal region and said inner tube distal region, said inner tube comprising a wall in said flexible region, said wall having a slit in said flexible region, said slit winding in a helical path about a longitudinal axis of said inner tube, said slit meandering back and forth with respect to said helical path, wherein said meandering slit defines alternating teeth and recesses, each recess having an associated tooth and each tooth being disposed in a recess, said teeth and said recesses having a shape which prohibits an axial slippage of said teeth out of said recesses; and
a cutting tool disposed at said distal region of said inner tube for cutting the tissue subjected to an influence of said cutting tool in a vicinity of said opening in said distal region of said outer tube.

24. A tube, comprising:

a rigid proximal region;

a distal region; and

a flexible region disposed between and connecting said rigid proximal region and said distal region, said flexible region with a tube wall having a slit, said slit winding in a helical path about a longitudinal axis of said tube and meandering back and forth with respect to said helical path, wherein said meandering slit defines alternating teeth and recesses, wherein each recess has an associated tooth and each tooth is disposed in a recess, said teeth and said recesses having a shape which prohibits an axial slippage of said teeth out of said recesses.